



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466
MAY 4 1998

Ref: 8P2-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Kathy Turner
Petroleum Engineering Technician
Petroglyph Operating Company, Inc.
P. O. Box 1839
Hutchinson, Kansas 67504-1839

RE: UNDERGROUND INJECTION CONTROL (UIC)
Conversion of Additional Well to
Antelope Creek Waterflood
EPA Area Permit UT2736-00000
Duchesne County, Utah

Dear Ms. Turner:

Your letter of December 23, 1997, requesting that the following production well be converted to a Class II enhanced oil recovery well and added to the Antelope Creek Waterflood, as authorized under the Modified EPA Area Permit #UT2736-00000 is hereby granted.

<u>NAME</u>	<u>LOCATION</u>	<u>EPA WELL PERMIT NO.</u>
Ute Tribal #33-16D3	SE/Se Section 33 T 4 S - R 3 W Duchesne County, UT	#UT2736-04423

This additional well is within the boundary of the recently modified area permit for the Antelope Creek Waterflood (UT2736-00000), and this addition is made by modification under the authority of 40 CFR § 144.33 (c) and according to the terms and conditions of that permit. Unless specifically mentioned in this Permit Modification, all terms and conditions of the modified permit will apply to the construction, operation, monitoring, and plugging and abandonment of this additional injection well. The proposed well location, well schematic, conversion procedures, plugging and abandonment plan and schematic, submitted by your office, have been reviewed and approved as follows:

- (1) The conversion of this production well has been reviewed, and found satisfactory, therefore, no corrective action is required.
- (2) Maximum injection pressure (P_{max}) - the permittee shall limit the maximum surface injection pressure (P_{max}) to 2512 psig. Permit provision have been made that allow the operator to request an increase or decrease in the injection pressure.



Printed on Recycled Paper

The calculations for the fracture gradient was estimated from instantaneous shut-in pressures (ISIP's) observed during fracturing treatments performed on seven (7) individually fraced zones within the Ute Tribal #33-16D3 well which established an average fracture gradient (F_g) of 0.98 psi/ft. This F_g is acceptable to the Environmental Protection Agency (EPA) and a theoretical maximum allowable surface injection pressure (P_{max}), for this well, may be calculated as shown below:

$$P_{max} = [F_g - 0.433 (Sg)] d$$

Where: P_{max} = Maximum surface injection pressure at wellhead

d = 4592' shallowest perforations after conversion

S_g = Specific gravity of injected water

$$P_{max} = [0.98 - .433 (1.00)] 4592$$

$$P_{max} = 2512 \text{ psig}$$

Until such time as the permittee demonstrates that a fracture gradient other than 0.98 psi/ft applies to the disposal zones of this newly converted well, the maximum allowable wellhead injection pressure (P_{max}) for this well will be 2512 psig.

- (3) The plugging and abandonment plan and schematic, submitted by your office, has been reviewed, and approved.

Prior to commencing injection into this well, permittee must fulfill permit condition Part II, C. 2. and have received separate written authorization to inject by the Environmental Protection Agency. In summary, these requirements for your newly permitted injection well are:

- (1) All conversion is complete and the permittee has submitted a completed Well Rework Record (EPA Form 7520-12).
- (2) The pore pressure has been determined.
- (3) The well has successfully completed and passed a mechanical integrity test (MIT); EPA form enclosed.

All other provisions and conditions of the permit remain as originally issued and/or recently modified.

If you have any questions, please contact Mr. Chuck Williams at (303) 312-6625. Also, please direct the above requirements to Mr. Williams at the above letterhead address, citing MAIL CODE 8P2-W-GW. Thank you for your continued cooperation.

Sincerely,

Stephen J. Tuber
for Kerrigan G. Clough
Assistant Regional Administrator
Office of Pollution Prevention,
State and Tribal Assistance

Enclosure: EPA Form

cc: Mr. Ronald Wopsock, Chairman
Uintah & Ouray Business Committee

Ms. Elaine Willie, Environmental Director
Ute Indian Tribe

Norman Cambridge
BIA - Uintah & Ouray Agency

Mr. Jerry Kenczka
BLM - Vernal District Office

Mr. Gilbert Hunt
State of Utah Natural Resources
Division of Oil, Gas & Mining

Thank you for using Return Receipt Service.

5/5/98 CW 3292C (to Diesel #33-1603) SENDER: <ul style="list-style-type: none"> ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered. 		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: Ms. Kathy Turner Geology/Petroleum Engineering Technician Petroglyph Operating Company, Inc. P.O. Box 1839 Hutchinson, KS 67504-1839		4a. Article Number P 213 403 793
		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
		7. Date of Delivery MAY - 8 1998
5. Received By: (Print Name) Kathy Turner		8. Addressee's Address (Only if requested and fee is paid) <i>need</i> MAY 11 1998
6. Signature: (Addressee or Agent) X Kathy Turner		
Domestic Return Receipt		

PS Form 3811, December 1994

P 213 403 793	
5/5/98 CW 3293C (3293C)	
US Postal Service	
Receipt for Certified Mail	
No Insurance Coverage Provided.	
Do not use for International Mail (See reverse)	
Sent to Ms. Kathy Turner	
Street & Number Geology/Petroleum Engineering Technician Petroglyph Operating Company, P.O. Box 1839 \$ Inc. Hutchinson, KS 67504-1839 Certified Fee	
Postage	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees \$	
Postmark or Date	

PS Form 3800, April 1995

Mechanical Integrity Test
Casing or Annulus Pressure Test for Well UT2736-04423

U.S. Environmental Protection Agency
Underground Injection Control Program, UIC Implementation Section, 8WM-DW
999 18th Street, Suite 500, Denver, CO 80202-2466
This form was printed on 04/28/1998.

EPA Witness: _____ Date ____ / ____ / ____
Test conducted by: _____
Others present: _____

UTE TRIBAL #33-16 D3 ANTELOPE CREEK Petroglyph Operating Company, Inc., Hutchinson, KS	2R UC as of / / SESE 33 04S 03W Op ID PTG01
--	---

Last MIT: No record / / Max Allowed Press psig	1997 Max Reported Press 0 psig
---	--------------------------------

Is this a regularly scheduled test? Yes No
Initial test for permit? Yes No
Test after well rework? Yes No

Well injecting during test? NO YES _____ BPD

Initial casing/tubing annulus pressure _____ psig
Does the annulus pressure build back up? Yes No

TUBING PRESSURE			
Initial	psig	psig	psig
End of Test	psig	psig	psig
CASING/TUBING ANNULUS PRESSURE			
Time	Test #1	Test #2	Test #3
0 min	psig	psig	psig
5			
10			
15 min			
20			
25			
30 min			
Result (circle)	Pass	Fail	Pass
			Fail

MAY 4 1998

Ref: 8P2-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Kathy Turner
 Petroleum Engineering Technician
 Petroglyph Operating Company, Inc.
 P. O. Box 1839
 Hutchinson, Kansas 67504-1839

RE: UNDERGROUND INJECTION CONTROL (UIC)
 Conversion of Additional Well to
 Antelope Creek Waterflood
 EPA Area Permit UT2736-00000
 Duchesne County, Utah

Dear Ms. Turner:

Your letter of December 23, 1997, requesting that the following production well be converted to a Class II enhanced oil recovery well and added to the Antelope Creek Waterflood, as authorized under the Modified EPA Area Permit #UT2736-00000 is hereby granted.

<u>NAME</u>	<u>LOCATION</u>	<u>EPA WELL PERMIT NO.</u>
<i>Ute Tribal #33-16D3</i>	SE/Se Section 33 T 4 S - R 3 W Duchesne County, UT	#UT2736-04423

This additional well is within the boundary of the recently modified area permit for the Antelope Creek Waterflood (UT2736-00000), and this addition is made by modification under the authority of 40 CFR § 144.33 (c) and according to the terms and conditions of that permit. Unless specifically mentioned in this Permit Modification, all terms and conditions of the modified permit will apply to the construction, operation, monitoring, and plugging and abandonment of this additional injection well. The proposed well location, well schematic, conversion procedures, plugging and abandonment plan and schematic, submitted by your office, have been reviewed and approved as follows:

- (1) The **conversion** of this production well has been reviewed, and found satisfactory, therefore, no corrective action is required.
- (2) **Maximum injection pressure (Pmax)** - the permittee shall limit the maximum surface injection pressure (Pmax) to 2512 psig. Permit provision have been made that allow the operator to request an increase or decrease in the injection pressure.

*CWD
8P2-W-GW
4/29/98*

*John W. GW
4/29/98*

*8P2-W-GW
4/30/98 LG
mailed 5/5/98 LG*

*P.L.W.
Tabor
Gardner
Shull
5/4/98*

The calculations for the fracture gradient was estimated from instantaneous shut-in pressures (ISIP's) observed during fracturing treatments performed on seven (7) individually fraced zones within the Ute Tribal #33-16D3 well which established an average fracture gradient (Fg) of 0.98 psi/ft. This Fg is acceptable to the Environmental Protection Agency (EPA) and a theoretical maximum allowable surface injection pressure (Pmax), for this well, may be calculated as shown below:

$$P_{max} = [F_g - 0.433 (S_g)] d$$

Where: P_{max} = Maximum surface injection pressure at wellhead

d = 4592' shallowest perforations after conversion

S_g = Specific gravity of injected water

$$P_{max} = [0.98 - .433 (1.00)] 4592$$

$$P_{max} = 2512 \text{ psig}$$

Until such time as the permittee demonstrates that a fracture gradient other than 0.98 psi/ft applies to the disposal zones of this newly converted well, the maximum allowable wellhead injection pressure (P_{max}) for this well will be 2512 psig.

- (3) The plugging and abandonment plan and schematic, submitted by your office, has been reviewed, and approved.

Prior to commencing injection into this well, permittee must fulfill permit condition Part II, C. 2. and have received separate written authorization to inject by the Environmental Protection Agency. In summary, these requirements for your newly permitted injection well are:

- (1) All conversion is complete and the permittee has submitted a completed Well Rework Record (EPA Form 7520-12).
- (2) The pore pressure has been determined.
- (3) The well has successfully completed and passed a mechanical integrity test (MIT); EPA form enclosed.

All other provisions and conditions of the permit remain as originally issued and/or recently modified.

If you have any questions, please contact Mr. Chuck Williams at (303) 312-6625. Also, please direct the above requirements to Mr. Williams at the above letterhead address, citing **MAIL CODE 8P2-W-GW**. Thank you for your continued cooperation.

Sincerely,

Kerrigan G. Clough
Assistant Regional Administrator
Office of Pollution Prevention,
State and Tribal Assistance

Enclosure: EPA Form

cc: Mr. Ronald Wopsock, Chairman
Uintah & Ouray Business Committee

Ms. Elaine Willie, Environmental Director
Ute Indian Tribe

Norman Cambridge
BIA - Uintah & Ouray Agency

Mr. Jerry Kenczka
BLM - Vernal District Office

Mr. Gilbert Hunt
State of Utah Natural Resources
Division of Oil, Gas & Mining

FCD: May 1, 1998. Chuck W., F:\DATA\WP\PETROGLF\MNRMD-33.16D



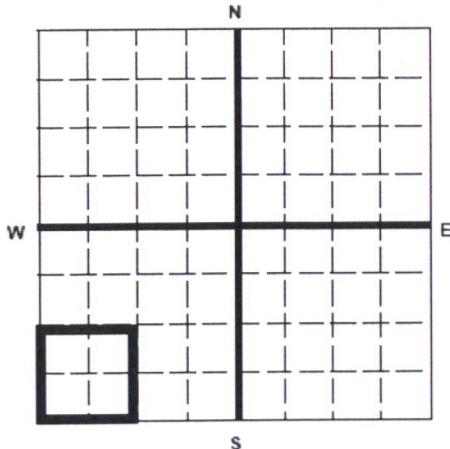
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
Petroglyph Operating Company, Inc. 2258
P.O. Box 7608
Boise, Idaho 83709

Name and Address of Surface Owner
Ute Indian Tribe
P.O. Box 70
Ft. Duchesne, Utah, 84026

Locate Well and Outline Unit on
Section Plat - 640 Acres



State Utah	County Duchesne	Permit Number UT2736-04423			
Surface Location Description					
_____ 1/4 of	_____ 1/4 of SW	_____ 1/4 of SW	_____ 1/4 of Section 33	Township 4S	Range 3W
Locate well in two directions from nearest lines of quarter section and drilling unit					
Surface					
Location 662 ft. frm (N/S) S Line of quarter section and 737 ft. from (E/W) E Line of quarter section.					
WELL ACTIVITY		TYPE OF PERMIT			
<input type="checkbox"/> Brine Disposal	<input type="checkbox"/> Individual				
<input checked="" type="checkbox"/> Enhanced Recovery	<input checked="" type="checkbox"/> Area				
<input type="checkbox"/> Hydrocarbon Storage	Number of Wells 111				
Lease Name Ute Indian Tribe		Well Number UTE TRIBAL 33-16-D3			

INJECTION PRESSURE			TOTAL VOLUME INJECTED		TUBING – CASING ANNULUS PRESSURE (OPTIONAL MONITORING)		
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	16	2003	2013	858		0	0
February	16	1991	1996	845		0	0
March	16	1974	1983	828		0	0
April	16	1972	1978	924		0	0
May	16	2005	2049	1318		0	0
June	16	2056	2090	1521		0	0
July	16	2080	2087	1611		0	0
August	16	2091	2113	1274		0	0
September	16	2049	2066	1089		0	0
October	16	2039	2044	1831		0	0
November	16	2025	2046	934		0	0
December	16	2032	2038	1217		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Chad Stevenson, Water Facilities Supervisor

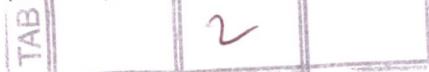
Signature

Date Signed

03/21/2017

GREEN BLUE CBI

U2 Entered



Date 4/7/17

Initial 33

Units of Measurement: Standard

Water Analysis Report

Production Company: PETROGLYPH OPERATING CO INC - EBUS
 Well Name: UTE TRIBAL 33-16D3 INJ, DUCHESNE
 Sample Point: Well Head
 Sample Date: 1/6/2017
 Sample ID: WA-345343

Sales Rep: James Patry
 Lab Tech: Kaitlyn Natelli

Scaling potential predicted using ScaleSoftPitzer from
 Brine Chemistry Consortium (Rice University)

Sample Specifics	
Test Date:	1/25/2017
System Temperature 1 (°F):	300
System Pressure 1 (psig):	2000
System Temperature 2 (°F):	130
System Pressure 2 (psig):	50
Calculated Density (g/ml):	1.0004
pH:	8.00
Calculated TDS (mg/L):	4482.19
CO2 in Gas (%):	
Dissolved CO2 (mg/L):	45.00
H2S in Gas (%):	
H2S in Water (mg/L):	5.00
Tot. Suspended Solids(mg/L):	
Corrosivity(LanglierSat.Indx)	0.00
Alkalinity:	

Analysis @ Properties in Sample Specifics			
Cations	mg/L	Anions	mg/L
Sodium (Na):	1315.60	Chloride (Cl):	1500.00
Potassium (K):	12.33	Sulfate (SO4):	90.00
Magnesium (Mg):	19.81	Bicarbonate (HCO3):	1342.00
Calcium (Ca):	42.87	Carbonate (CO3):	
Strontium (Sr):	2.08	Hydroxide(HO):	
Barium (Ba):	3.70	Acetic Acid (CH3COO):	
Iron (Fe):	94.80	Propionic Acid (C2H5COO):	
Zinc (Zn):	44.39	Butanoic Acid (C4H7COO):	
Lead (Pb):	0.19	Isobutyric Acid ((CH3)2CHCOO):	
Ammonia NH3:		Fluoride (F):	
Manganese (Mn):	0.30	Bromine (Br):	
Aluminum (Al):	0.37	Silica (SiO2):	14.12
Lithium (Li):	2.68	Calcium Carbonate (CaCO3):	
Boron (B):	2.04	Phosphates (PO4):	6.62
Silicon (Si):	6.60	Oxygen (O2):	

Notes:

(PTB = Pounds per Thousand Barrels)

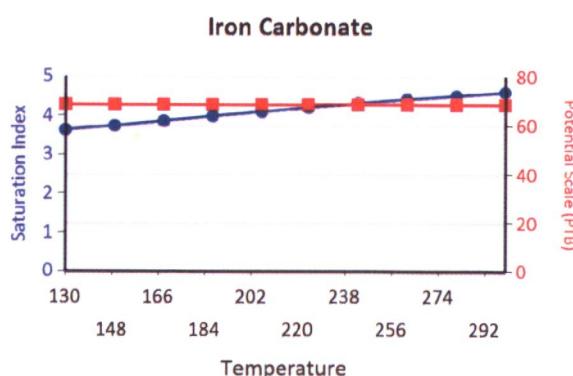
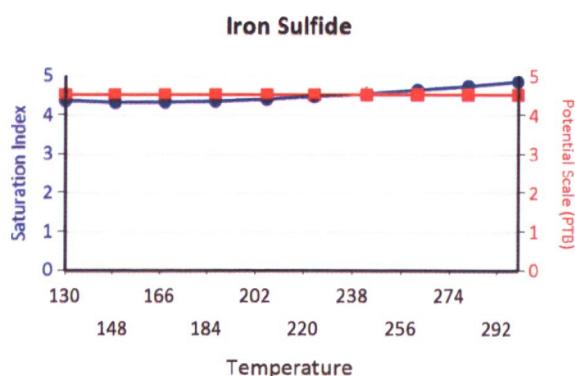
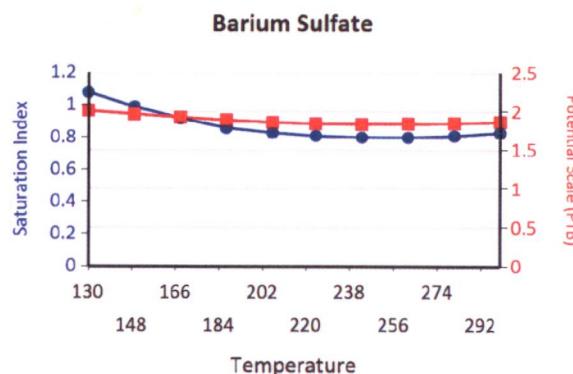
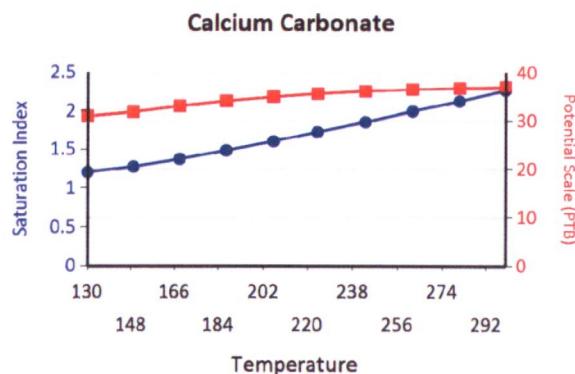
Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
130.00	50.00	1.21	31.09	1.08	2.02	4.38	4.54	3.64	68.85	0.00	0.00	0.00	0.00	0.00	0.00	11.63	5.04
149.00	267.00	1.28	31.97	0.99	1.97	4.33	4.54	3.75	68.87	0.00	0.00	0.00	0.00	0.00	0.00	11.38	5.04
168.00	483.00	1.38	33.17	0.92	1.93	4.34	4.54	3.87	68.89	0.00	0.00	0.00	0.00	0.00	0.00	11.19	5.04
187.00	700.00	1.49	34.20	0.86	1.90	4.36	4.54	4.00	68.90	0.00	0.00	0.00	0.00	0.00	0.00	11.03	5.04
206.00	917.00	1.61	35.06	0.83	1.87	4.41	4.54	4.11	68.91	0.00	0.00	0.00	0.00	0.00	0.00	10.89	5.04
224.00	1133.00	1.73	35.73	0.81	1.85	4.48	4.54	4.22	68.92	0.00	0.00	0.00	0.00	0.00	0.00	10.77	5.04
243.00	1350.00	1.86	36.25	0.80	1.84	4.56	4.54	4.33	68.92	0.00	0.00	0.00	0.00	0.00	0.00	10.68	5.04
262.00	1567.00	2.00	36.63	0.80	1.85	4.65	4.54	4.43	68.93	0.00	0.00	0.00	0.00	0.00	0.00	10.59	5.04
281.00	1783.00	2.13	36.91	0.81	1.86	4.75	4.54	4.52	68.93	0.00	0.00	0.00	0.00	0.00	0.00	10.53	5.04
300.00	2000.00	2.27	37.10	0.83	1.87	4.86	4.54	4.61	68.93	0.00	0.00	0.00	0.00	0.00	0.00	10.47	5.04

Water Analysis Report

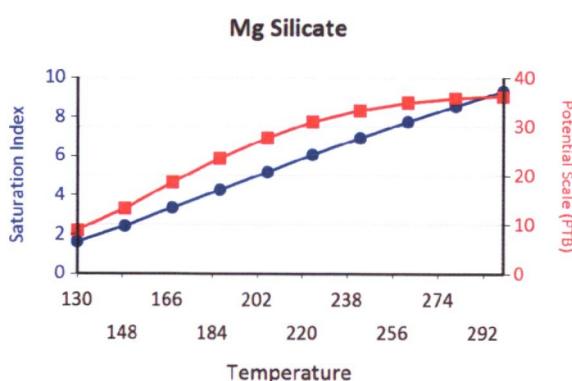
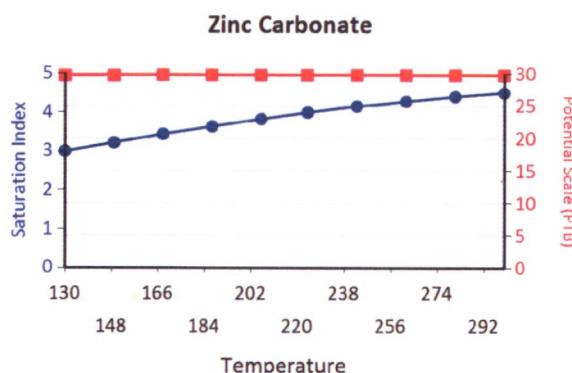
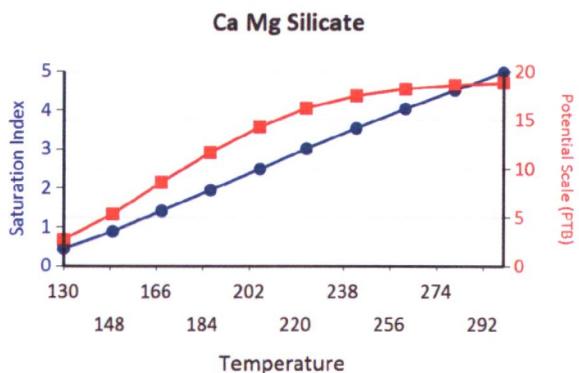
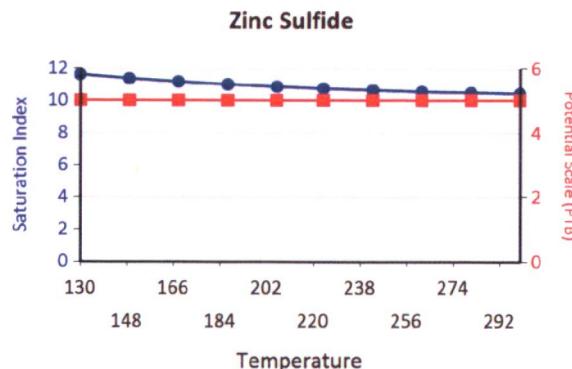
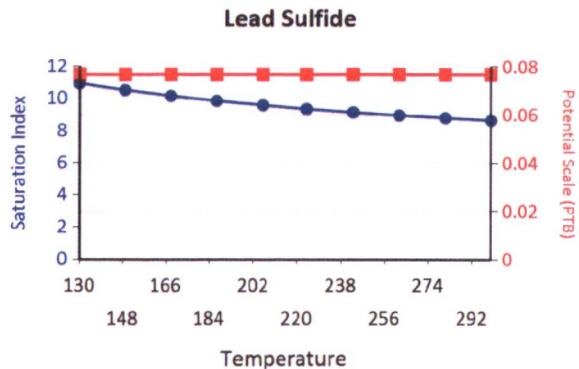
		Hemihydrate CaSO ₄ ~0.5H ₂ O		Anhydrate CaSO ₄		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
130.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	29.78	10.97	0.08	1.62	8.82	0.45	2.81	11.62	32.75
149.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	3.22	29.81	10.55	0.08	2.42	13.22	0.89	5.43	12.14	32.75
168.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	3.44	29.82	10.20	0.08	3.35	18.56	1.43	8.68	12.82	32.75
187.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	3.64	29.83	9.89	0.08	4.27	23.52	1.96	11.75	13.50	32.75
206.00	917.00	0.00	0.00	0.00	0.00	0.00	0.00	3.83	29.84	9.62	0.08	5.17	27.74	2.50	14.36	14.19	32.76
224.00	1133.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	29.84	9.38	0.08	6.06	31.02	3.02	16.29	14.88	32.76
243.00	1350.00	0.00	0.00	0.00	0.00	0.00	0.00	4.16	29.84	9.17	0.08	6.92	33.36	3.54	17.55	15.56	32.76
262.00	1567.00	0.00	0.00	0.00	0.00	0.00	0.00	4.29	29.84	8.98	0.08	7.76	34.91	4.04	18.27	16.22	32.76
281.00	1783.00	0.00	0.00	0.00	0.00	0.00	0.00	4.41	29.85	8.82	0.08	8.55	35.83	4.52	18.66	16.87	32.76
300.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	4.51	29.85	8.67	0.08	9.32	36.30	4.99	18.86	17.49	32.76

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate

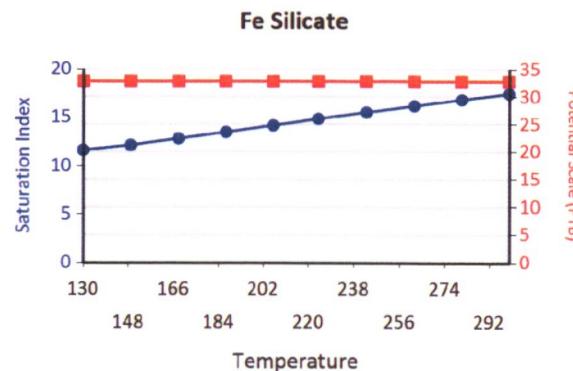
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Zinc Carbonate Lead Sulfide Mg Silicate Ca Mg Silicate Fe Silicate



Water Analysis Report



Water Analysis Report





June 1, 2017

Gary Wang or Don Breffle
Underground Injection Control Enforcement
U.S. Environmental Protection Agency
Mail Code: 8ENF-UFO
US EPA Region 8
1595 Wyncoop Street
Denver, CO 80202-1129

RE: 5-year Mechanical Integrity Tests

Mr. Wang/ Mr. Breffle:

Please find enclosed 5-year Mechanical Integrity Tests for the following wells:

- Ute Tribal 04-01
- Ute Tribal 08-06
- Ute Tribal 16-16
- Ute Tribal 18-14
- Ute Tribal 28-11
- Ute Tribal 29-02
- Ute Tribal 29-08A
- Ute Tribal 29-10
- Ute Tribal 29-11
- Ute Tribal 29-15
- Ute Tribal 30-16
- Ute Tribal 33-16D3 *WT 20736 - 04423*



Best Regards,

Nicole Colby
Manager, Land & Regulatory Compliance

U2 Entered
Date *6/14/17*
Initial *NC*

PETROGLYPH ENERGY, INC.

Mechanical Integrity Test

Tubing/Casing Annulus Pressure Test

U.S. Environmental Protection Agency
Underground Injection Control Program
1505 Wynkoop Street, Denver, CO 80202

EPA Witness: _____ Date: 5, 9, 17
 Test conducted by: CHRIS STEVENS
 Others present: _____

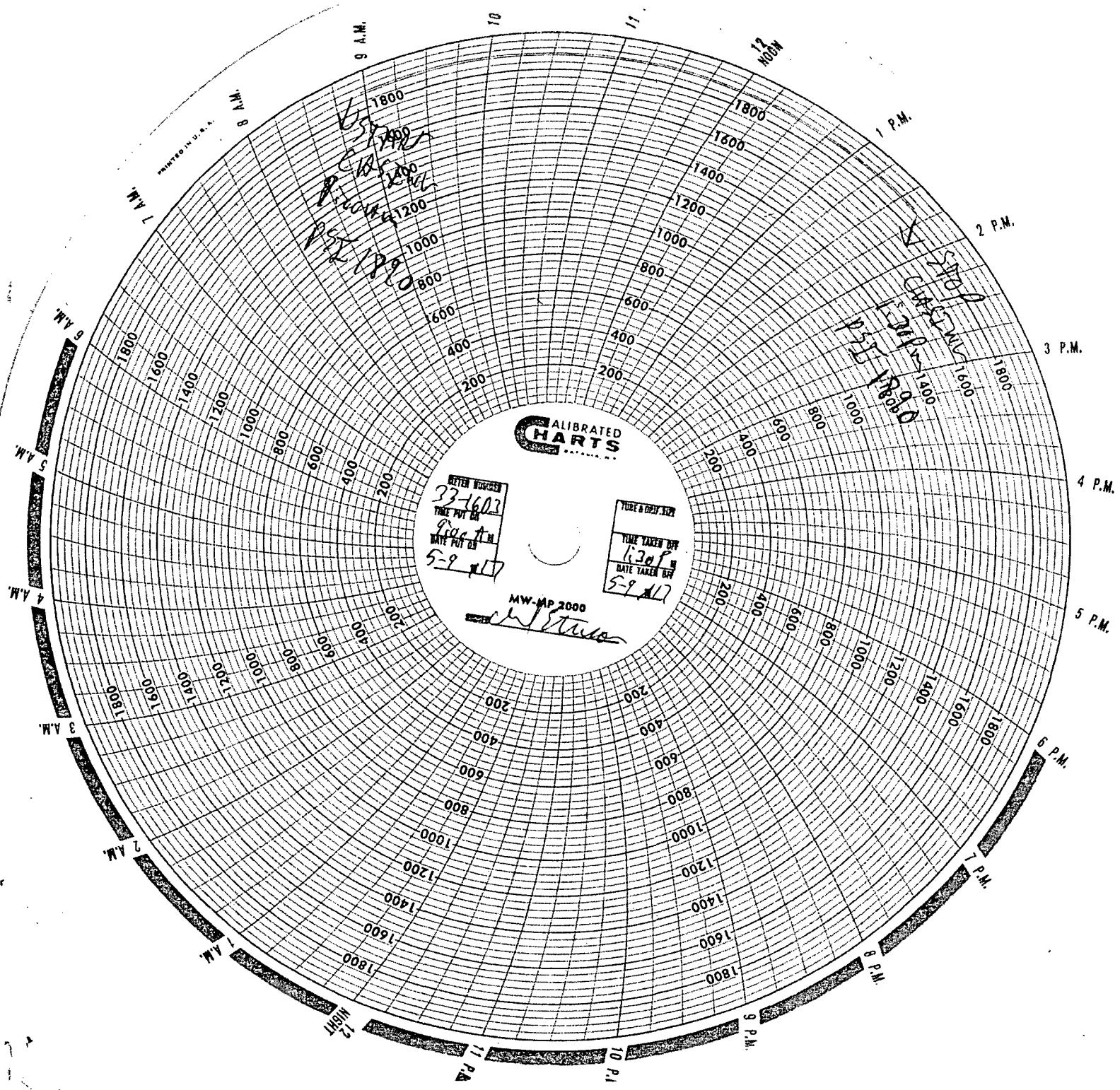
Well Name:	<u>JJ-1603</u>	Type:	ER SWD	Status:	AC TA UC
Field:	<u>ANTELOPE CREEK</u>				
Location:	<u>JJ-1603</u>	Sec:	<u>T</u>	N/S R:	<u>E/W</u>
Operator:	<u>PETROLEUM PK ENERGY</u>				
Last MIT:	<u>1</u>	<u>1</u>	Maximum Allowable Pressure:	<u>PSIG</u>	

Regularly scheduled test? Yes No
 Initial test for permit? Yes No
 Test after well rework? Yes No

Well injecting during test? If Yes, rate: 54 bpd
 Pre-test annulus pressure: psig

MIT DATA TABLE		Test #1	Test #2	Test #3
TUBING			PRESSURE RECORD	
Initial Pressure		2109 psig	psig	psig
End of test pressure		2109 psig	psig	psig
CASING / TUBING ANNULUS			PRESSURE RECORD	
0 minutes	1P90	psig	psig	psig
5 minutes	1P90	psig	psig	psig
10 minutes	1P90	psig	psig	psig
15 minutes	1P90	psig	psig	psig
20 minutes	1P90	psig	psig	psig
25 minutes	1P90	psig	psig	psig
30 minutes	1P90	psig	psig	psig
1/2 Hours-minutes	1P90	psig	psig	psig
_____ minutes		psig	psig	psig
RESULT	[] Pass	[] Fail	[] Pass	[] Fail
				[] Pass
				[] Fail

Does the annulus pressure build back up after the test? If Yes, _____ psig.



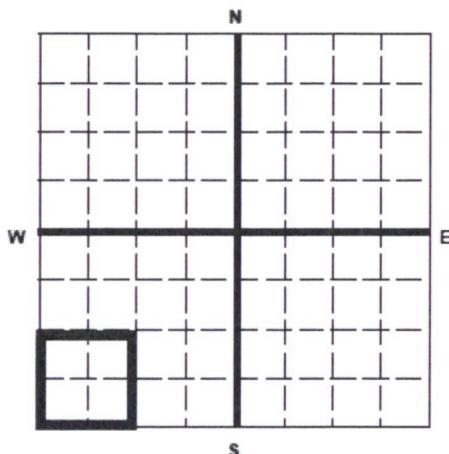
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
Petroglyph Operating Company, Inc. 2258
P.O. Box 7608
Boise, Idaho 83709

Name and Address of Surface Owner
Ute Indian Tribe
P.O. Box 70
Ft. Duchesne, Utah, 84026

Locate Well and Outline Unit on
Section Plat - 640 Acres



State Utah	County Duchesne	Permit Number UT2736-04434 04423
Surface Location Description <input type="checkbox"/> 1/4 of <input type="checkbox"/> 1/4 of SW <input type="checkbox"/> 1/4 of SW <input type="checkbox"/> 1/4 of Section 33 Township 4S Range 3W		
Locate well in two directions from nearest lines of quarter section and drilling unit		
Surface Location 662 ft. frm (N/S) S Line of quarter section and 737 ft. from (E/W) E Line of quarter section. U2 Entered		
WELL ACTIVITY <input type="checkbox"/> Brine Disposal <input checked="" type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage		TYPE OF PERMIT <input type="checkbox"/> Individual <input checked="" type="checkbox"/> Area Number of Wells 111
Lease Name Ute Indian Tribe		Date 3/3/16 Initial B
Well Number UTE TRIBAL 33-16-D3		

INJECTION PRESSURE			TOTAL VOLUME INJECTED		TUBING – CASING ANNULUS PRESSURE (OPTIONAL MONITORING)		
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	15	2106	2157	2033		0	0
February	15	2117	2144	1154		0	0
March	15	2116	2124	1437		0	0
April	15	2104	2114	1230		0	0
May	15	2102	2121	1237		0	0
June	15	2086	2096	1129		0	0
July	15	2077	2078	1142		0	0
August	15	2058	2071	974		0	0
September	15	2049	2061	921		0	0
October	15	2007	2009	805		0	0
November	15	2034	2043	1204		0	0
December	15	2029	2041	975		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)
Chad Stevenson, Water Facilities Supervisor

Signature

COFFEE BLUE CRI

Date Signed
02/08/2016

Units of Measurement: Standard

Water Analysis Report

Production Company: PETROGLYPH OPERATING CO INC - EBUS
Well Name: UTE TRIBAL 33-16D3 INJ, DUCHESNE
Sample Point: Well Head
Sample Date: 1/6/2016
Sample ID: WA-327697

Sales Rep: James Patry
Lab Tech: Michele Pike

Scaling potential predicted using ScaleSoftPitzer from
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics											
		Cations				mg/L				Anions			
Test Date:	1/14/2016	Sodium (Na):				1554.78	Chloride (Cl):						2000.00
System Temperature 1 (°F):	60	Potassium (K):				3.53	Sulfate (SO ₄):						460.00
System Pressure 1 (psig):	2000	Magnesium (Mg):				72.82	Bicarbonate (HCO ₃):						976.00
System Temperature 2 (°F):	180	Calcium (Ca):				161.82	Carbonate (CO ₃):						
System Pressure 2 (psig):	50	Strontium (Sr):				4.88	Acetic Acid (CH ₃ COO):						
Calculated Density (g/ml):	1.0010	Barium (Ba):				1.38	Propionic Acid (C ₂ H ₅ COO):						
pH:	7.10	Iron (Fe):				1.24	Butanoic Acid (C ₃ H ₇ COO):						
Calculated TDS (mg/L):	5264.09	Zinc (Zn):				0.50	Isobutyric Acid ((CH ₃) ₂ CHCOO):						
CO ₂ in Gas (%):		Lead (Pb):				0.68	Fluoride (F):						
Dissolved CO ₂ (mg/L):	80.00	Ammonia NH ₃ :					Bromine (Br):						
H ₂ S in Gas (%):		Manganese (Mn):				0.02	Silica (SiO ₂):						26.44
H ₂ S in Water (mg/L):	0.00	Aluminum (Al):				0.06	Calcium Carbonate (CaCO ₃):						
Tot. Suspended Solids(mg/L):		Lithium (Li):				1.57	Phosphates (PO ₄):						4.32
Corrosivity(LanglierSat.Indx)	0.00	Boron (B):				0.13	Oxygen (O ₂):						
Alkalinity:		Silicon (Si):				12.36							

Notes:

(PTB = Pounds per Thousand Barrels)

Calcium Carbonate				Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO ₄ ·2H ₂ O		Celestite SrSO ₄		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	50.00	1.07	89.61	1.02	0.74	0.00	0.00	1.11	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.00	267.00	0.90	77.56	1.04	0.75	0.00	0.00	0.92	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	483.00	0.80	69.36	1.07	0.75	0.00	0.00	0.79	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	700.00	0.69	61.15	1.11	0.76	0.00	0.00	0.65	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.00	917.00	0.59	53.06	1.16	0.76	0.00	0.00	0.52	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	1133.00	0.50	45.23	1.23	0.77	0.00	0.00	0.39	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	1350.00	0.42	37.79	1.30	0.78	0.00	0.00	0.26	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.00	1567.00	0.34	30.83	1.40	0.79	0.00	0.00	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	1783.00	0.27	24.45	1.50	0.80	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.00	2000.00	0.21	18.73	1.63	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

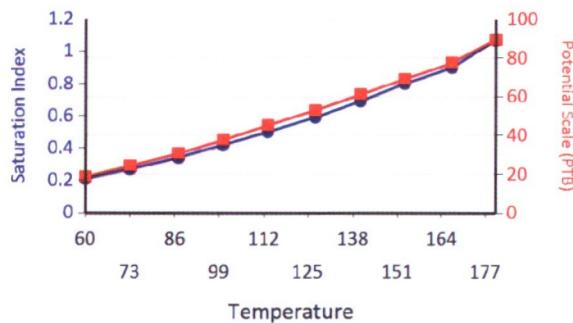
Water Analysis Report

		Hemihydrate CaSO ₄ ~0.5H ₂ O		Anhydrate CaSO ₄		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
180.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.27	0.00	0.00	1.57	23.32	0.41	5.99	3.50	0.90
167.00	267.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.22	0.00	0.00	0.42	6.05	0.00	0.00	2.49	0.82
153.00	483.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.15	0.00	0.00	0.00	0.00	0.00	0.00	1.83	0.72
140.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	1.18	0.56
127.00	917.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.32
113.00	1133.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	1350.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.00	1567.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	1783.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

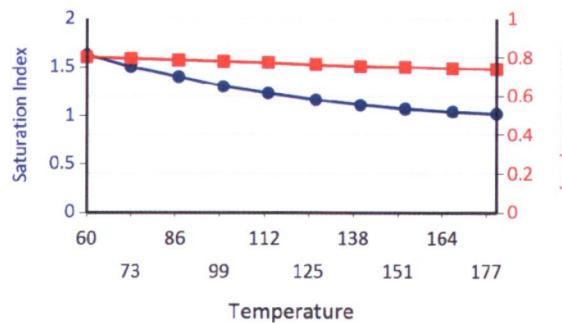
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate

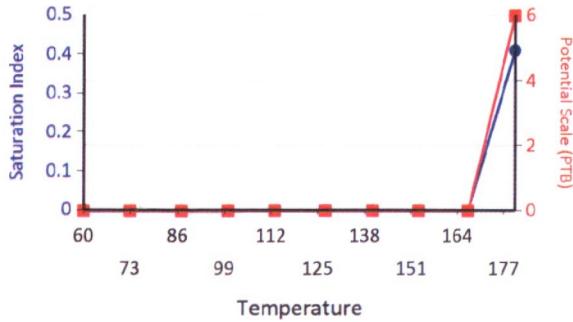
Calcium Carbonate



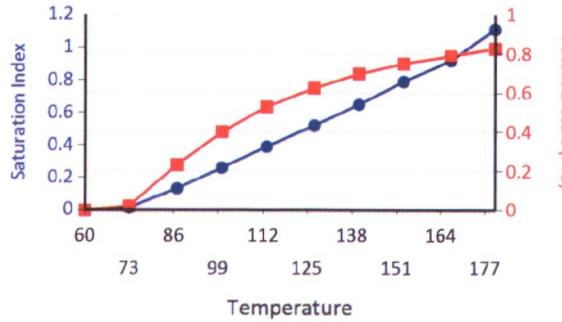
Barium Sulfate



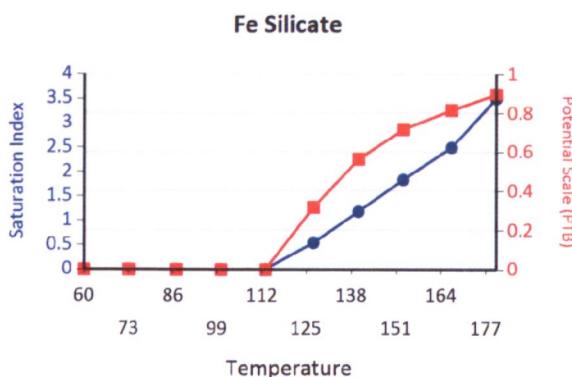
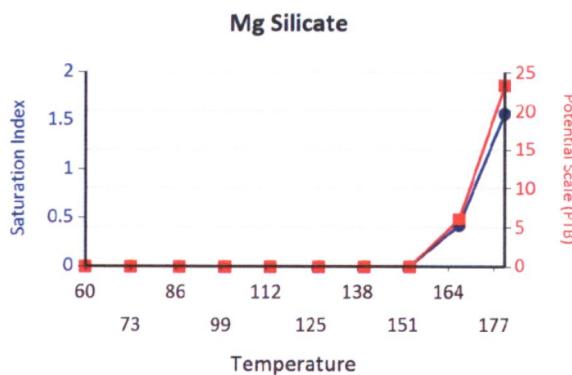
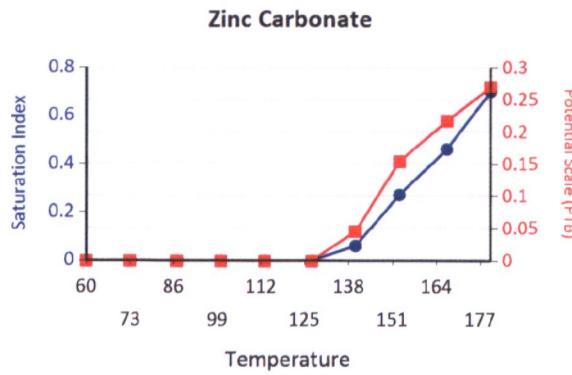
Ca Mg Silicate



Iron Carbonate



Water Analysis Report



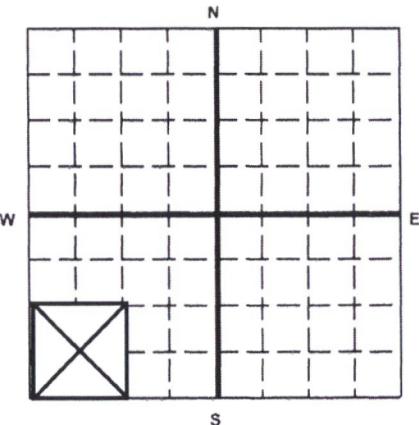


ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
 Petroglyph Operating Company, Inc. 2258
 P.O. Box 7608
 Boise, Idaho 83709

Name and Address of Surface Owner
 Ute Indian Tribe
 P.O. Box 70
 Ft. Duchesne, Utah 84026

Locate Well and Outline Unit on
 Section Plat - 640 Acres



State	Utah	County	Permit Number
		Duchesne	UT2736-04423
Surface Location Description			
1/4 of SW 1/4 of SW 1/4 of Section 33 Township 4S Range 3W			
Locate well in two directions from nearest lines of quarter section and drilling unit			
Surface			
Location 662 ft. frm (N/S) S Line of quarter section and 737 ft. from (E/W) E Line of quarter section.			
WELL ACTIVITY		TYPE OF PERMIT	
<input type="checkbox"/> Brine Disposal	<input type="checkbox"/> Individual	<input checked="" type="checkbox"/> Enhanced Recovery	<input checked="" type="checkbox"/> Area
<input type="checkbox"/> Hydrocarbon Storage	Number of Wells 111		
Lease Name: Ute Indian Tribe		Well Number: UTE TRIBAL 33-16-D3	

INJECTION PRESSURE			TOTAL VOLUME INJECTED				TUBING -- CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG	
January	14	2141	2152	368		0	0	
February	14	2165	2170	383		0	0	
March	14	2090	2170	530		0	0	
April	14	2149	2174	319		0	0	
May	14	2144	2147	335		0	0	
June	14	2145	2165	296		0	0	
July	14	2092	2121	202		0	0	
August	14	2115	2138	406		0	0	
September	14	2073	2105	925		0	0	
October	14	2050	2062	1018		0	0	
November	14	2017	2030	838		0	0	
December	14	2042	2046	1246		0	0	

Certification

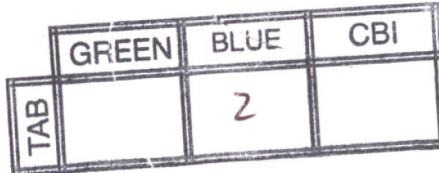
I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)	Signature	Date Signed
Chad Stevenson, Water Facilities Supervisor		2/10/2015

U2 Entered

Date 3/31/15

Initial GW



Units of Measurement: Standard

Water Analysis Report

Production Company: PETROGLYPH OPERATING CO INC - EBUS
 Well Name: UTE TRIBAL 33-16D3 INJ, DUCHESNE
 Sample Point: WELLHEAD
 Sample Date: 1/7/2015
 Sample ID: WA-297471

Sales Rep: James Patry
 Lab Tech: Gary Winegar

Scaling potential predicted using ScaleSoftPitzer from
 Brine Chemistry Consortium (Rice University)

Sample Specifics	
Test Date:	1/14/2015
System Temperature 1 (°F):	160
System Pressure 1 (psig):	1300
System Temperature 2 (°F):	80
System Pressure 2 (psig):	15
Calculated Density (g/ml):	0.9988
pH:	6.50
Calculated TDS (mg/L):	2486.08
CO ₂ in Gas (%):	
Dissolved CO ₂ (mg/L):	24.00
H ₂ S in Gas (%):	
H ₂ S in Water (mg/L):	5.00

Analysis @ Properties in Sample Specifics			
	Cations	mg/L	Anions
Sodium (Na):	138.68	Chloride (Cl):	1000.00
Potassium (K):	1.28	Sulfate (SO ₄):	344.00
Magnesium (Mg):	76.82	Bicarbonate (HCO ₃):	732.00
Calcium (Ca):	162.00	Carbonate (CO ₃):	
Strontium (Sr):	4.62	Acetic Acid (CH ₃ COO):	
Barium (Ba):	0.09	Propionic Acid (C ₂ H ₅ COO):	
Iron (Fe):	1.07	Butanoic Acid (C ₃ H ₇ COO):	
Zinc (Zn):	0.21	Isobutyric Acid ((CH ₃) ₂ CHCOO):	
Lead (Pb):	0.00	Fluoride (F):	
Ammonia NH ₃ :		Bromine (Br):	
Manganese (Mn):	0.05	Silica (SiO ₂):	25.26

Notes:

B=.69 Al=0 Li=.21

(PTB = Pounds per Thousand Barrels)

Temp (°F)	PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO ₄ ·2H ₂ O		Celestite SrSO ₄		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
80.00	14.00	0.00	0.00	0.56	0.04	0.67	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.20	0.11
88.00	157.00	0.00	0.00	0.47	0.04	0.52	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	0.11
97.00	300.00	0.00	0.00	0.40	0.03	0.52	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.84	0.11
106.00	443.00	0.00	0.00	0.33	0.03	0.51	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.73	0.11
115.00	585.00	0.04	4.20	0.26	0.02	0.52	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.64	0.11
124.00	728.00	0.08	8.98	0.21	0.02	0.53	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.55	0.11
133.00	871.00	0.12	13.93	0.16	0.02	0.55	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.48	0.11
142.00	1014.00	0.17	18.99	0.11	0.01	0.58	0.42	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	7.41	0.11
151.00	1157.00	0.22	24.15	0.07	0.01	0.61	0.43	0.08	0.12	0.00	0.00	0.00	0.00	0.00	0.00	7.34	0.11
160.00	1300.00	0.27	29.39	0.04	0.00	0.65	0.44	0.14	0.21	0.00	0.00	0.00	0.00	0.00	0.00	7.28	0.11

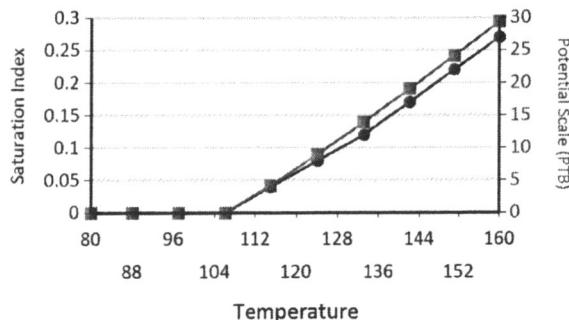
Temp (°F)	PSI	Hemihydrate CaSO ₄ ·0.5H ₂ O		Anhydrate CaSO ₄		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
80.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Water Analysis Report

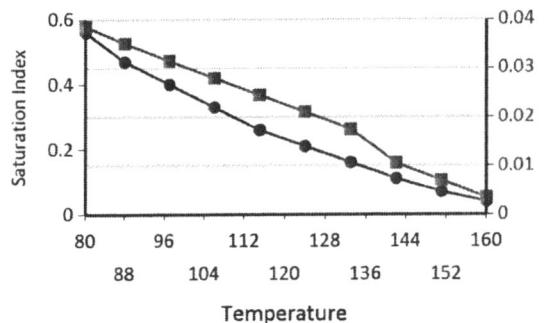
These scales have positive scaling potential under initial temperature and pressure: Barium Sulfate Iron Sulfide Zinc Sulfide

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide

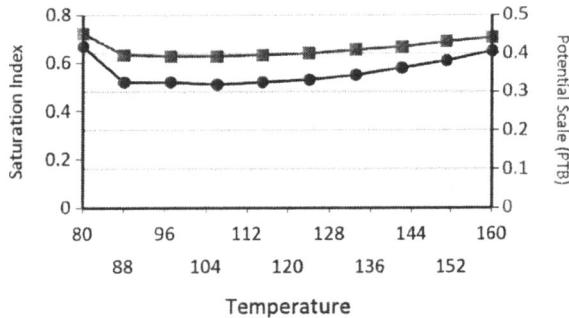
Calcium Carbonate



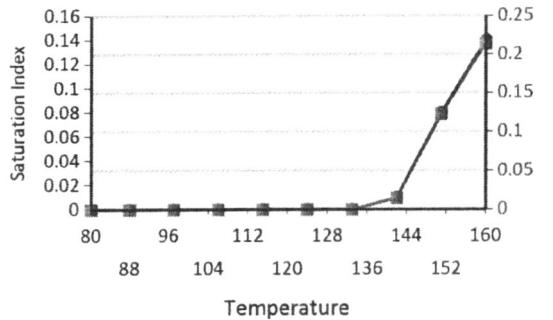
Barium Sulfate



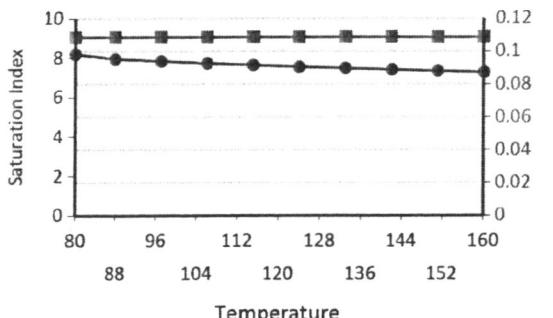
Iron Sulfide



Iron Carbonate



Zinc Sulfide



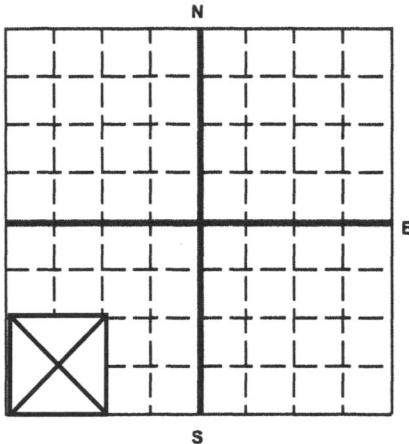
United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee
Petroglyph Operating Company, Inc. 2258
P.O. Box 7608
Boise, Idaho 83709

Name and Address of Surface Owner
Ute Indian Tribe
P.O. Box 70
Ft. Duchesne, Utah 84026

Locate Well and Outline Unit on
Section Plat - 640 Acres



State Utah	County Duchesne	Permit Number UT2736-04423
---------------	--------------------	-------------------------------

Surface Location Description

1/4 of 1/4 of SW 1/4 of SW 1/4 of Section 33 Township 4S Range 3W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface

Location 662 ft. frm (N/S) S Line of quarter section
and 737 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY	TYPE OF PERMIT
<input type="checkbox"/> Brine Disposal	<input type="checkbox"/> Individual
<input checked="" type="checkbox"/> Enhanced Recovery	<input checked="" type="checkbox"/> Area
<input type="checkbox"/> Hydrocarbon Storage	Number of Wells 111

Lease Name Ute Indian Tribe Well Number UTE TRIBAL 33-16-D3

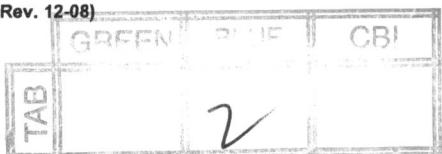
TUBING -- CASING ANNULUS PRESSURE
(OPTIONAL MONITORING)

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	13	2141	2167	2471		0	0
February	13	2171	2198	2597		0	0
March	13	2140	2161	2116		0	0
April	13	2194	2206	2710		0	0
May	13	2213	2226	2815		0	0
June	13	2183	2220	1472		0	0
July	13	2207	2236	1001		0	0
August	13	2193	2232	802		0	0
September	13	2181	2247	515		0	0
October	13	2143	2164	370		0	0
November	13	2156	2164	463		0	0
December	13	2150	2158	407		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)	Signature	Date Signed
Chad Stevenson, Water Facilities Supervisor		2/11/2014



U2 Entered

Date 3/26/14
Initial 33

Units of Measurement: Standard

Water Analysis Report

Production Company: PETROGLYPH ENERGY INC
Well Name: UTE TRIBAL 33-16D3 INJ
Sample Point: Wellhead
Sample Date: 1/8/2014
Sample ID: WA-263018

Sales Rep: James Patry
Lab Tech: Gary Winegar

Scaling potential predicted using ScaleSoftPitzer from
Brine Chemistry Consortium (Rice University)

Sample Specifics	
Test Date:	1/15/2014
System Temperature 1 (°F):	180
System Pressure 1 (psig):	1300
System Temperature 2 (°F):	60
System Pressure 2 (psig):	15
Calculated Density (g/ml):	1.007
pH:	8.40
Calculated TDS (mg/L):	14108.66
CO2 in Gas (%):	
Dissolved CO2 (mg/L):	0.00
H2S in Gas (%):	
H2S in Water (mg/L):	0.00

Analysis @ Properties in Sample Specifics			
Cations	mg/L	Anions	mg/L
Sodium (Na):	5147.45	Chloride (Cl):	7000.00
Potassium (K):	58.00	Sulfate (SO4):	20.00
Magnesium (Mg):	7.40	Bicarbonate (HCO3):	1805.60
Calcium (Ca):	20.00	Carbonate (CO3):	
Strontium (Sr):	5.00	Acetic Acid (CH3COO):	
Barium (Ba):	20.00	Propionic Acid (C2H5COO):	
Iron (Fe):	0.89	Butanoic Acid (C3H7COO):	
Zinc (Zn):	0.43	Isobutyric Acid ((CH3)2CHCOO):	
Lead (Pb):	0.09	Fluoride (F):	
Ammonia NH3:		Bromine (Br):	
Manganese (Mn):	0.26	Silica (SiO2):	23.54

Notes:

B=6 Al=0 Li=1.4

(PTB = Pounds per Thousand Barrels)

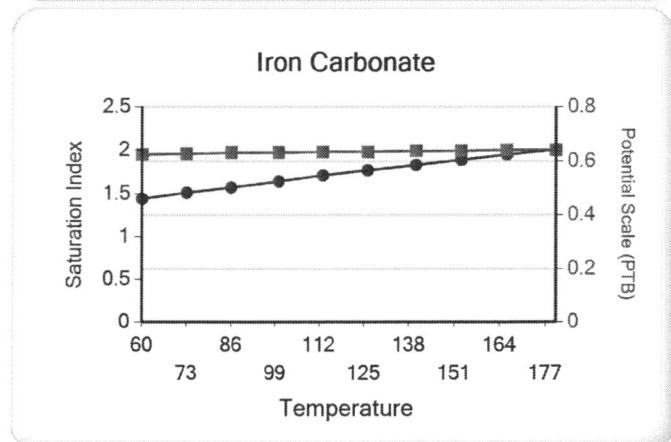
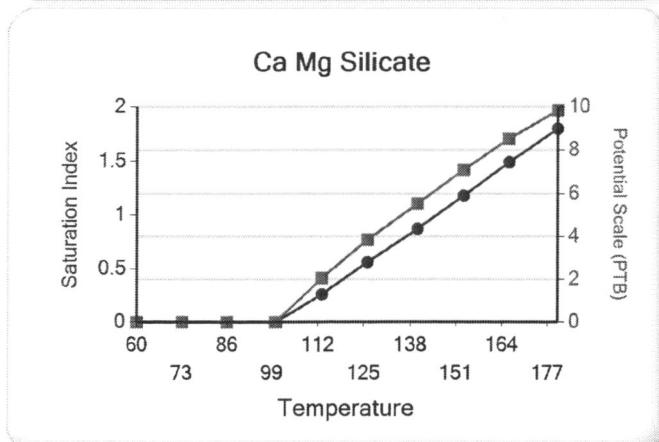
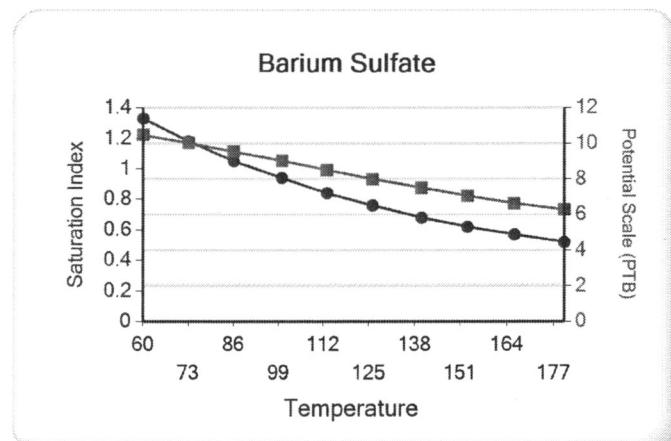
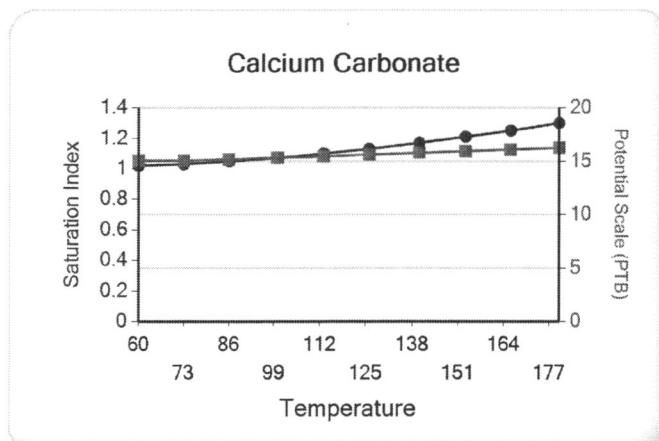
		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	1.02	15.04	1.33	10.46	0.00	0.00	1.44	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.00	157.00	1.03	15.06	1.18	10.01	0.00	0.00	1.51	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86.00	300.00	1.05	15.17	1.05	9.53	0.00	0.00	1.57	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	443.00	1.07	15.31	0.94	9.02	0.00	0.00	1.64	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113.00	585.00	1.10	15.45	0.84	8.51	0.00	0.00	1.71	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126.00	728.00	1.13	15.61	0.76	7.99	0.00	0.00	1.77	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.00	871.00	1.17	15.77	0.68	7.51	0.00	0.00	1.83	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153.00	1014.00	1.21	15.93	0.62	7.05	0.00	0.00	1.89	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166.00	1157.00	1.25	16.09	0.57	6.64	0.00	0.00	1.95	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.00	1300.00	1.30	16.24	0.52	6.27	0.00	0.00	2.01	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Water Analysis Report

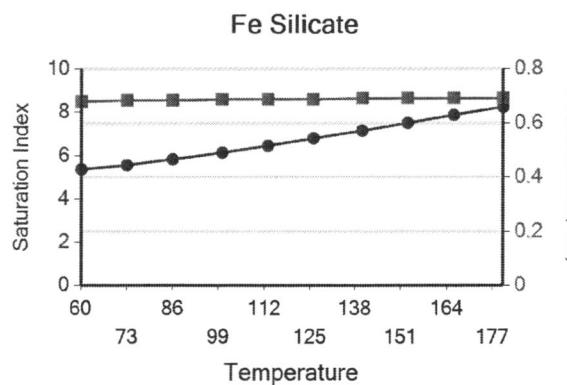
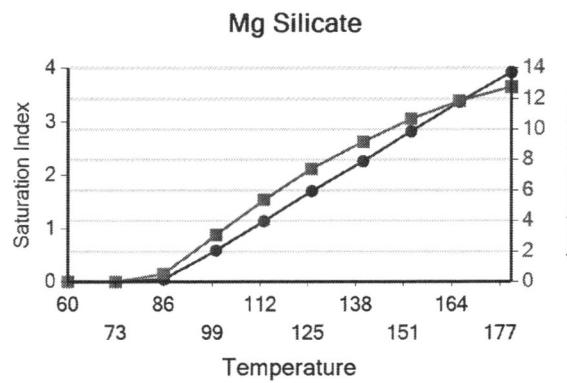
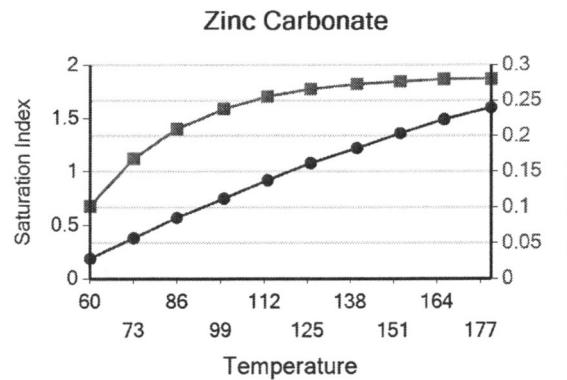
		Hemihydrate $\text{CaSO}_4 \cdot 0.5\text{H}_2\text{O}$		Anhydrate CaSO_4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
60.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.10	0.00	0.00	0.00	0.00	0.00	0.00	5.36	0.68
73.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.17	0.00	0.00	0.00	0.00	0.00	0.00	5.56	0.68
86.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.21	0.00	0.00	0.05	0.54	0.00	0.00	5.83	0.68
100.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.24	0.00	0.00	0.59	3.07	0.00	0.00	6.13	0.69
113.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.26	0.00	0.00	1.14	5.38	0.26	2.06	6.45	0.69
126.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.27	0.00	0.00	1.70	7.42	0.56	3.84	6.79	0.69
140.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.27	0.00	0.00	2.26	9.19	0.87	5.52	7.14	0.69
153.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	0.28	0.00	0.00	2.82	10.68	1.18	7.10	7.50	0.69
166.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49	0.28	0.00	0.00	3.37	11.86	1.49	8.54	7.87	0.69
180.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.28	0.00	0.00	3.92	12.77	1.80	9.84	8.24	0.69

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Zinc Carbonate Mg Silicate Ca Mg Silicate Fe Silicate



Water Analysis Report





United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

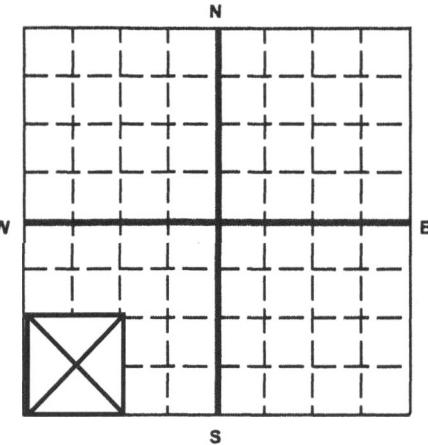
Name and Address of Existing Permitter

Petroglyph Operating Company, Inc. 2258
P.O. Box 7608
Boise, Idaho 83709

Name and Address of Surface Owner

Ute Indian Tribe
P.O. Box 70
Ft. Duchesne, Utah 84026

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Utah

County
Duchesne

Permit Number
UT2736-04423

Surface Location Description

1/4 of 1/4 of SW 1/4 of SW 1/4 of Section 33 Township 4S Range 3W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface

Location 662 ft. frm (N/S) S Line of quarter section
and 737 ft. from (E/W) E Line of quarter section.

WELL ACTIVITY

- Brine Disposal
- Enhanced Recovery
- Hydrocarbon Storage

TYPE OF PERMIT

- Individual
- Area

Number of Wells 111

Lease Name Ute Indian Tribe

Well Number UTE TRIBAL 33-16-D3

**TUBING – CASING ANNULUS PRESSURE
(OPTIONAL MONITORING)**

MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
January	12	1946	1948	2032		0	0
February	12	1954	1954	1812		0	0
March	12	1945	1955	1748		0	0
April	12	244	1821	0		0	2100
May	12	612	1133	0		0	1960
June	12	1199	1219	0		0	0
July	12	1548	1637	3223		0	0
August	12	1940	2038	5025		0	0
September	12	2120	2178	5089		0	0
October	12	2152	2188	3394		0	0
November	12	2127	2158	2589		0	0
December	12	2155	2172	2802		0	0

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Chad Stevenson, Water Facilities Supervisor

Signature

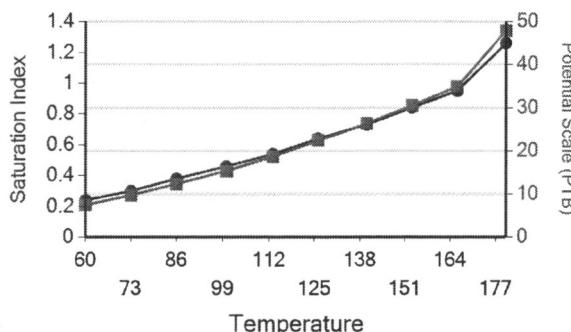
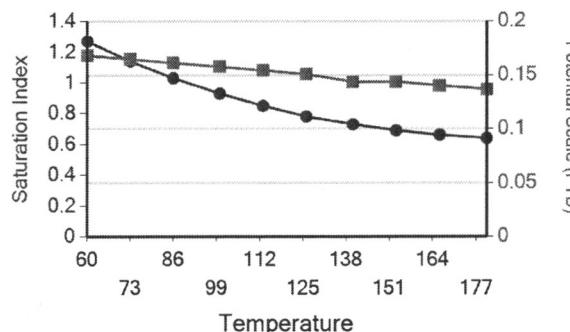
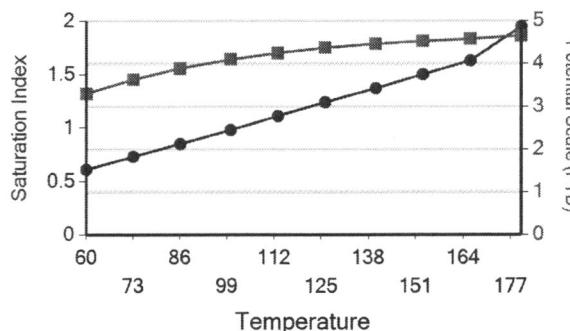
Date Signed

2/6/2013

Water Analysis Report

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate

Calcium Carbonate**Barium Sulfate****Iron Carbonate**

RECEIVED

FEB 19 2013

Office of Legal Enforcement Program
Region 8 EPA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

FEB 2, 1999

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mrs. Deanna Bell, Operations Coordinator
Petroglyph Operating Company, Inc.
4116 West 3000 South Ioka Lane
P.O. Box 607
Roosevelt, UT 84066

Re: AUTHORIZATION TO COMMENCE INJECTION
Ute Tribal #33-16D3 (UT04423)
EPA AREA PERMIT UT2736-00000
Duchesne County, Utah

Dear Mrs. Bell

Thank you for submitting information pertaining to Ute Tribal #33-16D3 to the Environmental Protection Agency (EPA) Region VIII Groundwater Program. Requirements of UIC Permit UT2736-04423 Part II Sections (C) (2) "Prior To Commencing Injection" required submittal of the following information:

1. Well Rework Record (EPA Form 7520-12) with after conversion well schematic,
2. Successfully run Mechanical Integrity Test (MIT) with pressure chart,
3. Injection zone fluid pore pressure survey.
4. Compensated Neutron Log (CNL)

All required information has been submitted, and has been reviewed and approved by the EPA. Petroglyph has complied with all pertinent conditions of UIC Area Permit UT2736-00000 Part II Section (C) (2). Therefore, effective upon your receipt of this letter, Administrative approval hereby is granted for injection into the Ute Tribal #33-16D3 under the conditions of UIC Permit UT2736-04423. The Director has determined that the maximum surface injection pressure for the Ute Tribal #33-16D3 shall not exceed 2512 psig.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

FEB 2, 1999

*Scan under
UT 20736-04423
Authorization to
Inject final*

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mrs. Deanna Bell, Operations Coordinator
Petroglyph Operating Company, Inc.
4116 West 3000 South Ioka Lane
P.O. Box 607
Roosevelt, UT 84066

Re: **AUTHORIZATION TO COMMENCE INJECTION**
Ute Tribal #33-16D3 (UT04423)
EPA AREA PERMIT UT2736-00000
Duchesne County, Utah

Dear Mrs. Bell

Thank you for submitting information pertaining to Ute Tribal #33-16D3 to the Environmental Protection Agency (EPA) Region VIII Groundwater Program. Requirements of UIC Permit UT2736-04423 Part II Sections (C) (2) "Prior To Commencing Injection" required submittal of the following information:

1. Well Rework Record (EPA Form 7520-12) with after conversion well schematic,
2. Successfully run Mechanical Integrity Test (MIT) with pressure chart,
3. Injection zone fluid pore pressure survey.
4. Compensated Neutron Log (CNL)

All required information has been submitted, and has been reviewed and approved by the EPA. Petroglyph has complied with all pertinent conditions of UIC Area Permit UT2736-00000 Part II Section (C) (2). Therefore, effective upon your receipt of this letter, Administrative approval hereby is granted for injection into the Ute Tribal #33-16D3 under the conditions of UIC Permit UT2736-04423. The Director has determined that the maximum surface injection pressure for the Ute Tribal #33-16D3 shall not exceed 2512 psig.



Printed on Recycled Paper

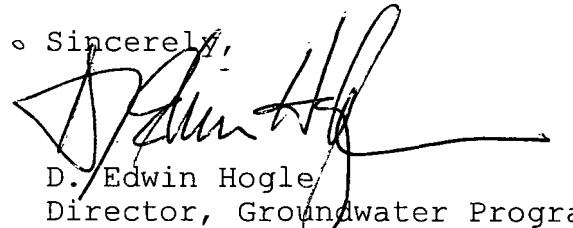
Please be reminded that it is the responsibility of the permittee to be aware of, and to comply with, all conditions of the permit. Effective upon receipt of this letter, EPA administration of this well is transferred to Mr. John Carson, Compliance Officer in the Office of Enforcement, Compliance, and Environmental Justice Technical Enforcement Program, who is your point of contact for routine compliance matters and reports.

Please send all reporting forms and other required correspondence to Mr. Carson at the address listed below, referencing EPA WELL ID: UT04423 on all reports and correspondence.

Mr. John Carson,
Technical Enforcement Program, Mail Code 8ENF-T
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado, USA, 80202-2466

If you have any questions concerning this authorization or the permit, please contact Mr. Dan Jackson of my staff at 303.312.6155 or Mr. Carson at 303.312.6203.

o Sincerely,



D. Edwin Hogle
Director, Groundwater Program
Office of Partnerships and
Regulatory Assistance

cc: Mr. Ronald Wopsock, Chairman
Uintah & Ouray Business Committee
Ute Indian Tribe

Ms. Elaine Willie, Environmental Director
Ute Indian Tribe

Mr. Norman Cambridge
BIA - Uintah & Ouray Agency

Mr. Gil Hunt
State of Utah Natural Resources
Division of Oil, Gas, and Mining

Mr. Jerry Kenczka
BLM - Vernal District Office

Thank you for using Return Receipt Service.

SENDER: 2/3/99 CW 3456C <input type="checkbox"/> Complete items 1 and/or 2 for additional services. <input type="checkbox"/> Complete items 3, 4a, and 4b. <input type="checkbox"/> Print your name and address on the reverse of this form so that we can return this card to you. <input type="checkbox"/> Attach this form to the front of the mailpiece, or on the back if space does not permit. <input type="checkbox"/> Write "Return Receipt Requested" on the mailpiece below the article number. <input type="checkbox"/> The Return Receipt will show to whom the article was delivered and the date delivered. <i>(Signature: Deanna Bell #33-1603)</i>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: Mrs. Deanna Bell Operations Coordinator Petroglyph Operating Co., Inc. 4116 West 3000 South Ioka Lane P.O. Box 607 Roosevelt, UT 84066		4a. Article Number P 380 306 124
		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
		7. Date of Delivery <i>2/18/99</i>
5. Received By: (Print Name) <i>Deanna Bell</i>		8. Addressee's Address (Only if requested and fee is paid) <i>neil L</i> FEB 18 1999
6. Signature: (Addressee or Agent) <i>X Deanna Bell</i>		
PS Form 3811, December 1994		102595-97-B-0179 Domestic Return Receipt

P 380 306 124
2/3/99 CW 3456C

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	
Mrs. Deanna Bell	
Street & Number	
Operations Coordinator	
Petroglyph Operating Co., Inc.	
4116 West 3000 South Ioka Lane	
Post Office Box 607	\$
Roosevelt, UT 84066	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees \$	
Postmark or Date	

PS Form 3800, April 1995



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

CONCURRENCE COPY

FEB 2 1999

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mrs. Deanna Bell, Operations Coordinator
Petroglyph Operating Company, Inc.
4116 West 3000 South Ioka Lane
P.O. Box 607
Roosevelt, UT 84066

Re: AUTHORIZATION TO COMMENCE INJECTION
Ute Tribal #33-16D3 (UT04423)
EPA AREA PERMIT UT2736-00000
Duchesne County, Utah

Dear Mrs. Bell

Thank you for submitting information pertaining to Ute Tribal #33-16D3 to the Environmental Protection Agency (EPA) Region VIII Groundwater Program. Requirements of UIC Permit UT2736-04423 Part II Sections (C) (2) "Prior To Commencing Injection" required submittal of the following information:

- ✓ 1. Well Rework Record (EPA Form 7520-12) with after conversion well schematic,
- ✓ 2. Successfully run Mechanical Integrity Test (MIT) with pressure chart,
- ✓ 3. Injection zone fluid pore pressure survey.
- ✓ 4. Compensated Neutron Log (CNL)

All required information has been submitted, and has been reviewed and approved by the EPA. Petroglyph has complied with all pertinent conditions of UIC Area Permit UT2736-00000 Part II Section (C) (2). Therefore, effective upon your receipt of this letter, Administrative approval hereby is granted for injection into the Ute Tribal #33-16D3 under the conditions of UIC Permit UT2736-04423. The Director has determined that the maximum surface injection pressure for the Ute Tribal #33-16D3 shall not exceed 2512 psig.

Concur

8P-W-GW
D.Jackson
1-26-99

see correction
8P-W-GW
1/27/99 L6



Printed on Recycled Paper

Please be reminded that it is the responsibility of the permittee to be aware of, and to comply with, all conditions of the permit. Effective upon receipt of this letter, EPA administration of this well is transferred to Mr. John Carson, Compliance Officer in the Office of Enforcement, Compliance, and Environmental Justice Technical Enforcement Program, who is your point of contact for routine compliance matters and reports.

Please send all reporting forms and other required correspondence to Mr. Carson at the address listed below, referencing EPA WELL ID: UT04423 on all reports and correspondence.

Mr. John Carson,
Technical Enforcement Program, Mail Code 8ENF-T
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado, USA, 80202-2466

If you have any questions concerning this authorization or the permit, please contact Mr. Dan Jackson of my staff at 303.312.6155 or Mr. Carson at 303.312.6203.

Sincerely,

D. Edwin Hogle
Director, Groundwater Program
Office of Partnerships and
Regulatory Assistance

cc: Mr. Ronald Wopsock, Chairman
Uintah & Ouray Business Committee
Ute Indian Tribe

Ms. Elaine Willie, Environmental Director
Ute Indian Tribe

Mr. Norman Cambridge
BIA - Uintah & Ouray Agency

Mr. Gil Hunt
State of Utah Natural Resources
Division of Oil, Gas, and Mining

Mr. Jerry Kenczka
BLM - Vernal District Office